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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,138	06/21/2001	Goh Koh	210153US2RD	3089

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

TRAN, TRANG U

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/885,138

Applicant(s)

ITO ET AL.

Examiner

Trang U. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on March 19, 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-14, 17 and 19-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-14, 17, 19 and 21-39 is/are allowed.
- 6) ☒ Claim(s) 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed March 19, 2004 have been fully considered but they are not persuasive.

In re page 23, applicants argue, with respect to claim 20, that Faroudja does not teach or suggest a display device for changing and displaying a picture every frame but, rather, Faroudja teaches a video signal deinterlacer for generating a succession of progressively-scanned video frames in which each frame is repeated at least twice in succession.

In response, the examiner respectfully disagrees. As recognized by applicants that Faroudja teaches a video deinterlacer for generating a succession of progressively-scanned video frames in which each frame is repeated at least twice in succession. When the output of the deinterlacer of Faroudja is outputted to the display device, the display device is refreshed every frame. Since the display device of Faroudja is refreshed every frame, the display device of Faroudja displays a picture while changes the picture every frame as required by claim 20.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faroudja et al (US Patent No. 6,222,589 B1).

In considering claim 20, Faroudja et al discloses all the claimed subject matter, note 1) the claimed a display device configured to display a picture while changing the picture every frame picture is met by the LCD portable computer (col. 8, lines 29-59), 2) an image processing device comprising a picture signal converting part configured to convert an input picture signal, which is a picture signal for a picture to be displayed on a display device, and an input synchronizing signal, which is synchronized with the input picture signal, into an output picture signal, which is a picture signal for a picture suitable for the display for the display device, and an output synchronizing signal which is synchronized with the output picture signal, on the basis of picture information of the picture to be displayed on the display device, the picture signal converting part comprising: an input frame memory in which an input frame picture is recorded the input luminance (Y) and chrominance (U/V) of an interlaced nominally 50 Hz field-rate television signal (such as a PAL, SECAM, 50 Hz NTSC, 50 Hz HDTV or 50 Hz monochrome television) and the sync stripper 4 (Fig. 1, col. 3, line 58 to col. 4, line 23), 2) the claimed an input switching part configured to transmit a input frame picture to be displayed, to the input frame memory on the basis of the input picture signal and the input synchronizing signal is met by the switch 18 (Fig. 2A, col. 7, lines 41-67), 3) the claimed a picture converting part configured to product output frame pictures from input frame pictures, which have been recorded in the input frame memory, by producing an interpolated picture or inserting a black raster picture or thinning out the frame pictures,

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between frame pictures corresponding to the picture information, on the basis of the picture information and the input synchronizing signal and the output synchronizing signal, an output frame memory in which the output frame pictures are recorded is met by the two-frame ("double frame buffer") memory 8 (Figs. 1 and 2, col. 6, line 38 to col. 8, line 59), and 4) the claimed an output control switching part configured to take the output picture signal and the output synchronizing signal out of the output frame pictures, which have been recorded in the output frame memory, and to transmit the signals to the display device the switch 19 (Fig. 2A, col. 7, lines 41-67).

However, Faroudja et al explicitly does not disclose the claimed a black raster picture producing part in which a black raster picture has been produced or stored.

The capability of using black raster picture for produced or stored is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known of using black raster picture into Faroudja et al's system in order to increase flexibility of the system to convert the television signal to a form suitable for display on a progressively-scanned variable-frame rate high-resolution monitor of the type typical associated with a computer by using the black raster picture.

***Allowable Subject Matter***

4. Claims 9-14, 17, 19, 21-39 allowed.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Trang U. Tran** whose telephone number is **(703) 305-0090**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W. Miller**, can be reached at **(703) 305-4795**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 308-HELP.

TT TT  
November 4, 2003

  
MICHAEL H. LEE  
PRIMARY EXAMINER